**PAPER REVIEW NR 3**

**Paper:**

S. M. Siedl and M. Mara, “Am I still human? Wearing an exoskeleton impacts self-perceptions of warmth, competence, attractiveness, and machine-likeness”, Johannes Kepler University Linz, Linz, Austria, 2024

**Reviewer:**

Giovanni Filomeno

I confirm that I have read the paper and written the following texts myself

**1. Thematic focus**

The paper investigates the psychological effects of wearing occupational exoskeletons, focusing on how they influence self-perceptions of warmth, competence, attractiveness, and machine-likeness. It explores the potential dehumanizing effects of integrating such technologies into everyday work routines, particularly concerning human identity and social interactions within the workplace.

**2. Foundations**

* Exoskeleton
* Dehumanization
* Self-perception

**3. Method**

The method employed was a within-subjects laboratory experiment where participants performed tasks with and without an exoskeleton. Self-perceptions were quantitatively measured using questionnaires after each task to capture changes in warmth, competence, attractiveness, and machine-likeness.

**4. Key results**

* Wearing the exoskeleton decreased the perception of warmth and attractiveness.
* Perceptions of competence and machine-likeness positively affected the willingness to continue using the exoskeleton.

**5. Practical implications for AI or robotics**

The study's practical implications go into the direction of considering the psychological impact on users when designing wearable robots and not only on functional attributes. ​Additionally, the paper suggests considering also ethical aspect in robot design to diminish the sense of dehumanization.

**6. Strengths of the paper**

The paper's strengths lie in its innovative approach and robust methodology, using direct measurement techniques through questionnaires to capture the psychological impacts of exoskeleton use accurately.

**7. Weaknesses of the paper**

The weakness of the paper mainly consist in the poor generalizability since the study is conducted in a controlled laboratory with a specific type of exoskeleton and a defined number of participants. This environment set may not fully replicate the real-world applications where different conditions and complex dynamics occurs.

Additionally, the sample size of participants may not be representative of the broader population that could be affected by these technologies.

**8. Personal learnings**

I gained insights into the interplay between human self-perception and wearable technologies as well as read about a topic I didn’t consider before.